Article Index

- Acinar Cell and Contractile Cell in Isolated Pancreas and Salivary Gland Segment, The Effects of Neural Stimulation on, 49
- Alprenolol Binding and Cyclic AMP Production in Embryonic Chick Red Cells During Erythropoiesis, 259
- Calcium Indicator Arsenazo III, The pH Dependence and the Binding Equilibria of the, 169
- Cardiac Plasma Membranes Rich in Beta-Adrenoreceptors, Purification and Partial Characterization of, 185
- Chlorotetracycline Permeation in Fragmented, ATPase-Rich Sarcoplasmic Reticulum, Kinetics of, 291
- Contractile System (Myoepithelial Cells) in Isolated Salivary Gland Segments of Rat, Effect of Neural Stimulation on, 317
- Cross-linking of Erythrocyte Membrane Proteins and Phospholipids by Chemical Probes, 1
- Electrochemical Profile for the Ion Transport Across the Membrane of Proximal Tubular Cells, 67
- Electron Spin Resonance and Fluorescence Observations on Erythrocytes, Erythrocyte Membranes, 13762 Mat A Ascites Adenocarcinoma Cells and Their Membranes. Effects of Membrane Perturbations, 207
- H⁺ Substrate Cotransport by the Melibiose Membrane Carrier in Escherichia Coli, 131
- Inhibition of Lactose Transport in E. Coli by N-Ethylmaleimide-β-Galactoside, N-Ethylsuccinimide-β-Galactoside and N-Ethylmaleimide, 329
- Intracellular pH of Bullfrog Skeletal Muscle and Renal Tubular Cells with Double Barreled Antimony Microelectrodes, 99
- Membrane Cholesterol Depletion and K⁺ Transport in High and Low Potassium Sheep Red Cells, 21
- Membrane Potential Measurements in Cultured Intestinal Villi, 147
- Nicotinic Acetylcholine Receptors from Muscle, Purification and Characterization of, 229
- Passive Calcium Efflux in Fragmented Sarcoplasmic Reticulum, A Thermal Transition of, 271

Secretory Mechanism of a Silk Protein, Fibroin in the Posterior Silk Gland Cells of Bombyx Mori, 37

Systems A and L in Plasma Membrane Vesicles of the Ehrlich Cell, The Relation Between Membrane Potential and the Transport Activity of, 155

Author Index

Adams, Dorothy, 207 Ahmed, Mahmoud, S., 329 Baker, Stephen P., 185 Bradley, Ronald, 229 Carraway, Kermit, 207 Caswell, A., 291 Chiu, V. C., 169 Christensen, Halvor N., 155 Dwyer, Donald, 229 Fujimoto, M., 67, 99 Grey, J. E., 21 Haynes, Duncan, 169, 291 Inouye, A., 147 Kajino, K., 99 Katoh, Kazuo, 49, 317 Kemp, George, 229 Kilberg, Michael S., 155 Kubota, T., 67 Lauf, P. K., 21 Marinetti, Guido V., 1

Matsumura, Y., 99

Millman, Marshall S., 271, 291 Morley, Barbara, 229 Naito, K., 67 Nakagaki, Ikuko, 37 Nishiyama, A., 49, 317 Okada, Y., 147 Potter, Lincoln T., 185 Powell, Richard, 207 Saitoh, Shinjiroh, 49, 317 Sasaki, S., 37 Sha'afi, R. I., 259 Shaw, Arthur, B., 1 Smith, W. Bryan, 207 Struve, W. G., 329 Takeda, K., 131 Tsuchiya, T., 131 Tsuchiya, W., 147 Wacholtz, M. C., 259 Wakui, Masaru, 49, 317 Wilson, T. H., 131



Volume 3 1980

Membrane Biochemistry

An International Journal on the Biochemistry and Biophysics of Membranes

Adil E. Shamoo & George Sachs Co-Editors



Crane Russak • New York

The appearance of the code at the bottom of the first page of each article in this Journal indicates the copyright owner's consent that a single copy of the article may be made for personal use. This consent is given on the condition that for multiple copies the copier pay a fee of \$2.00 per copy through the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.

Membrane Biochemistry

ISSN: 0149-046X

Published by Crane, Russak & Company, Inc.

East 44th Street, New York, New York, 10017

Volume 3, 1980 (4 issues)
Subscription price for Volume 3: \$70.00 including postage.
Outside North America: \$78.00 including delivery by air.)
Single copy price: \$18.50. (Overseas orders add \$2.00 for delivery by air.)

Personal subscriptions, payable by personal check and mailed to home address: \$37.00 including postage. Outside North America: \$45.00 including delivery by air.

Copyright © 1980 Crane, Russak & Company, Inc.

No part of this publication may be stored in an electronic retrieval system or transmitted electronically without the prior written permission of the publisher.

Subscription orders and notification about change of address should be sent to the office of the publisher.

Claims for missing issues are honored only within five months of publication date.

A microform edition of this journal is available to all subscribers from University Microfilms International, Ann Arbor, Michigan 48106

In Japan, Crane Russak Journals are distributed exclusively by Kinokuniya, Tokyo.

Abstracted and/or indexed in
Abstracts Journal (Institute of Scientific Information, USSR)
Biological Abstracts
Chemical Abstracts Service
Current Contents/Life Sciences
Excerpta Medica
MEDLINE/Index Medicus
Science Citation Index

Printed in the United States of America

CONTENTS

Arthur B. Shaw and Guido V. Marinetti Cross-linking of Erythrocyte Membrane Proteins and Phospholipids by Chemical Probes	1
J. E. Grey and P. K. Lauf Membrane Cholesterol Depletion and K ⁺ Transport in High and Low	21
Potassium Sheep Red Cells	21
S. Sasaki and Ikuko Nakagaki Secretory Mechanism of a Silk Protein, Fibroin in the Posterior Silk Gland Cells of Bombyx Mori	37
A. Nishiyama, K. Katoh, S. Saitoh, and M. Wakui The Effects of Neural Stimulation on Acinar Cell and Contractile Cell in Isolated Pancreas and Salivary Gland Segment	49
M. Fujimoto, K. Naito, and T. Kubota Electrochemical Profile for the Ion Transport Across the Membrane of Proximal Tubular Cells	67
Y. Matsumura, K. Kajino, and M. Fujimoto Measurement of Intracellular pH of Bullfrog Skeletal Muscle and Renal Tubular Cells with Doubled Barreled Antimony Microelectrodes	99
T. Tsuchiya, K. Takeda, and T. H. Wilson H ⁺ Substrate Cotransport by the Melibiose Membrane Carrier in Escherichia Coli	131
W. Tsuchiya, Y. Okada, and A. Inouye Membrane Potential Measurements in Cultured Intestinal Villi	147

ACT TO KIND AT CLASS.	
Michael S. Kilberg and Halvor N. Christensen The Relation Between Membrane Potential and the Transport Activity of Systems A and L in Plasma Membrane Vesicles of the Ehrlich Cell	155
Vincent C. Chiu and Duncan Haynes The pH Dependence and the Binding Equilibria of the Calcium Indicator Arsenazo III	169
Stephen P. Baker and Lincoln T. Potter	
Purification and Partial Characterization of Cardiac Plasma	
Membranes Rich in Beta-Adrenoreceptors	185
Dorothy Adams, W. Bryan Smith, Richard Powell and Kermit Carraway Electron Spin Resonance and Fluorescence Observations on Erythrocytes, Erythrocyte Membranes, 13762 Mat A Ascites Adenocarcinoma Cells and Their Membranes. Effects of Membrane	
Perturbations	207
George Kemp, Barbara Morley, Donald Dwyer, and Ronald Bradley Purification and Characterization of Nicotinic Acetylcholine	
Receptors from Muscle	229
M. C. Wacholtz and R. I. Sha'afi	
Alprenolol Binding and Cyclic AMP Production in Embryonic Chick Red Cells During Erythropoiesis	259
Marshall S. Millman	
A Thermal Transition of Passive Calcium Efflux in Fragmented	
Sarcoplasmic Reticulum	271
Marshall S. Millman, A. Caswell, and D. H. Haynes	
Kinetics of Chlorotetracycline Permeation in Fragmented,	
ATP-ase-Rich Sarcoplasmic Reticulum	291
Akinori Nishiyama, Kazuo Katoh, Shinjiroh Saitoh, and Masaru Wakui	
Effect of Neural Stimulation on Contractile System (Myoepithelial Cells) in Isolated Salivary Gland Segments of Rat	317
Mahmoud S. Ahmed and W. G. Struve	
Inhibition of Lactose Transport in E. Coli by	
N-Ethylmaleimide-β-Galactoside:	
N-Ethylsuccinimide-β-Galactoside and N-Ethylmaleimide	329

